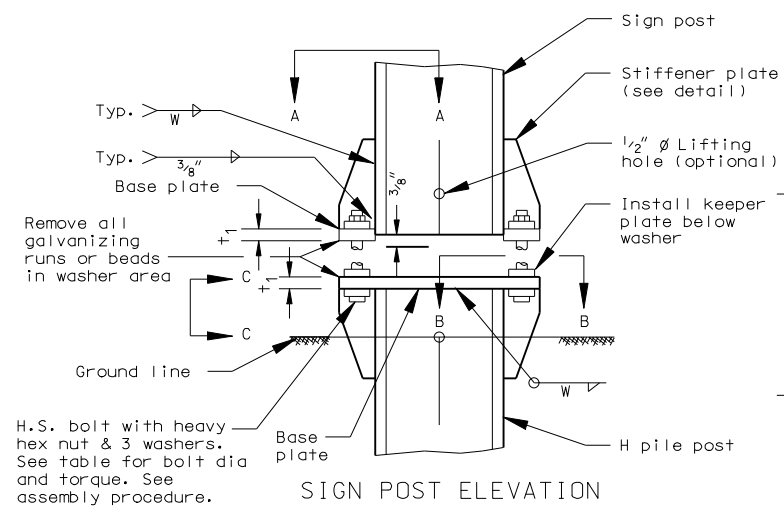
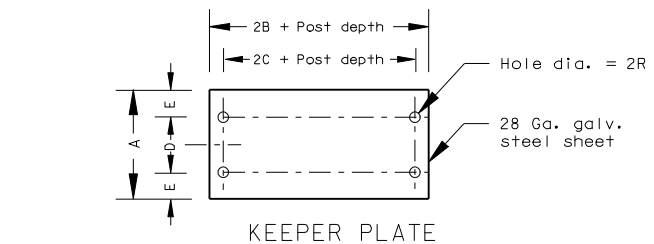


STRUCTURAL DETAILS W SHAPE SUPPORTS



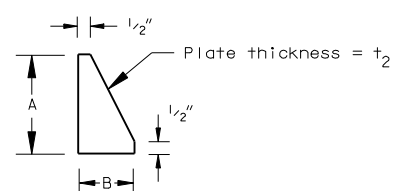
SIGN POST ELEVATION



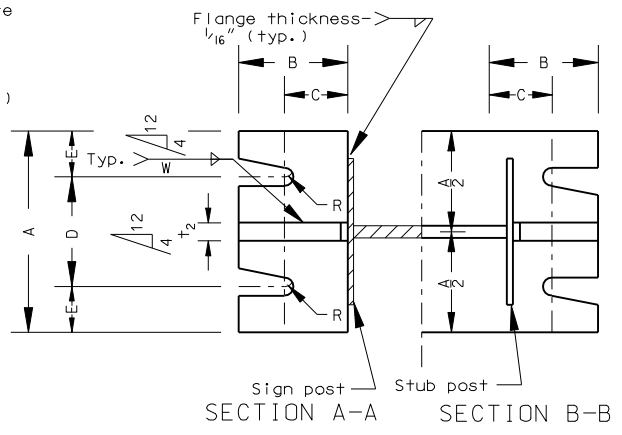
KEEPER PLATE

Furnish 2 - .012"± thick and 2 - .032"± thick shims per post. Shims shall be fabricated from brass shim stock or strip conforming to A.S.T.M. B36.

SHIM DETAIL

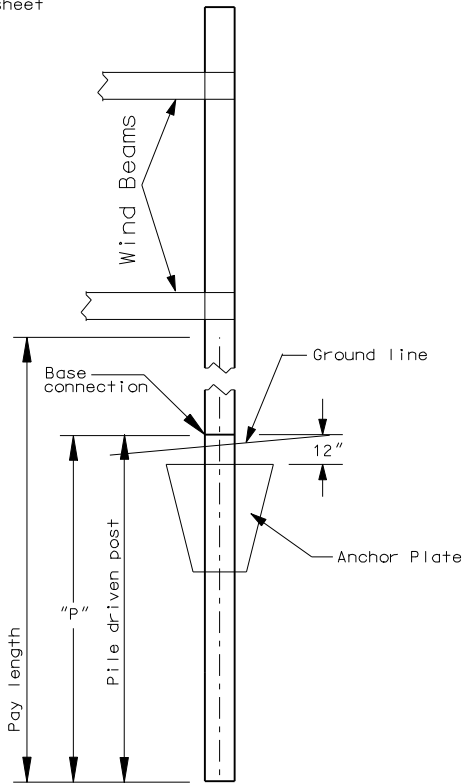


STIFFENER PLATE DETAIL
(See Table For Dimensions)

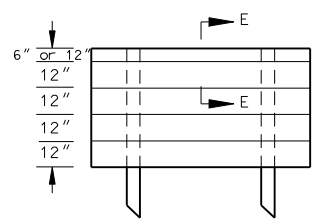


SECTION A-A SECTION B-B
(See Table For Dimensions)

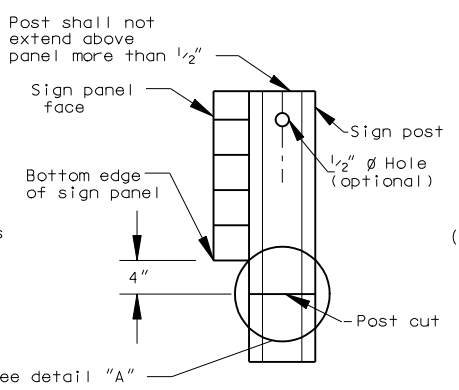
Sections shown are for installations on right shoulder and in gore. Plate slot bevels are opposite hand from that shown for installations on left shoulder.



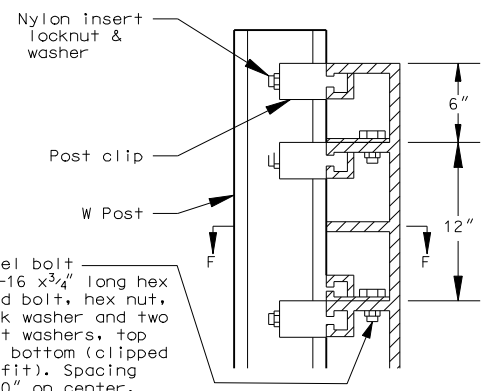
H-PILE FOOTING



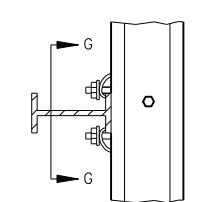
TYPICAL PANEL MOUNTING



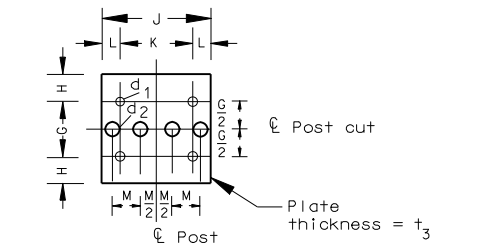
PERFORATED FUSE
SIDE VIEW



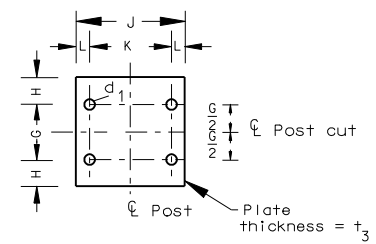
SECTION E-E



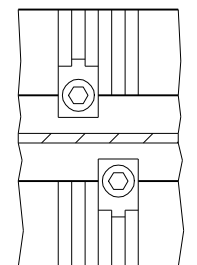
SECTION F-F



PERFORATED FUSE PLATE DETAIL
(See Table For Dimensions)

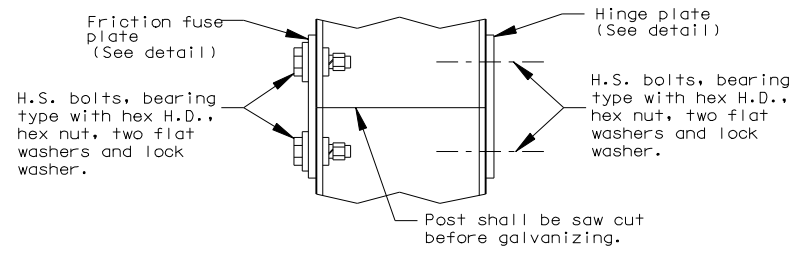


HINGE PLATE DETAIL
(See Table For Dimensions)

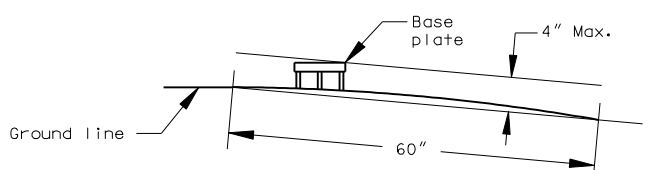


SECTION G-G

NOTE: Post clips shall be installed on both sides of each post at each panel joint as indicated.

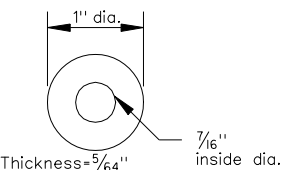


DETAIL "A" PERFORATED FUSE



SECTION C-C

Maximum projection of base plate shall not extend above a line, 4" parallel to any cord, which is perpendicular to (or aligned radially to) the center line of the highway and has the cord's end points on the ground surface on opposite sides of the stub post.



FLAT WASHER
DETAIL

DIMENSION POST SIZE	BASE CONNECTION DATA										FUSE AND HINGE PLATE DATA										FOOTING DATA	
	BOLT SIZE AND TORQUE	A	B	C	D	E	t ₁	t ₂	W	R	G	H	J	K	L	M	d ₁	d ₂	t ₃	BOLT DIA.	H PILE POST P	
W4X13	3/4" Ø x 3 1/2" Torque = 600"#	6"	2 1/2"	1 1/2"	3 1/2"	1 1/4"	1"	1/2"	1/4"	13 3/32"	2"	1 1/4"	4"	2 1/4"	7/8"	1"	1 1/16"	3/4"	3/8"	5/8"	14'	
W5X16											2 1/2"	1 1/4"	5"	2 3/4"	1 1/8"	1 1/8"	1 3/16"	7/8"	3/8"	3/4"	14'	
W6X20	7/8" Ø x 4 1/4" Torque = 800"#	8"	3"	1 3/4"	4"	2"	1 1/4"	1/2"	1/4"	15 3/32"	2 1/2"	1 1/4"	6"	3 1/2"	1 1/4"	1 3/8"	1 3/16"	1 1/8"	3/8"	3/4"	14'	
W8X24											2 1/2"	1 1/2"	6 1/2"	3 1/2"	1 1/2"	1 1/2"	1 5/16"	1 1/4"	1/2"	7/8"	14'	
W8X28	1" Ø x 5" Torque = 1000"#	8"	3"	2"	4"	2"	1 1/2"	3/4"	5/16"	17 3/32"	2 1/2"	1 1/2"	6 1/2"	3 1/2"	1 1/2"	1 5/8"	1 1/16"	1 1/8"	1/2"	1"	14'	
W8X31	1 1/8" Ø x 5" Torque = 1200"#	9"	3 1/2"	2"	5"	2"	1 1/2"	3/4"	5/16"	19 3/32"	3"	1 3/4"	8"	5 1/2"	1 1/4"	2"	1 1/16"	1 1/2"	1/2"	1"	14'	
W10X39											3"	1 3/4"	8"	5 1/2"	1 1/4"	1 7/8"	1 3/16"	1 3/8"	1/2"	1 1/8"	14'	

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
07-15-94	
REVISIONS	
DATE	CHANGE
06-20-95	Notes
09-08-95	Pay length
03-01-00	Flat washers
04-03-01	Remove splice plate
11-20-02	Revised note
03-26-04	Removed lock tite and added lock washer
08-09-04	Removed stub post
12-01-04	PE Stamp added
05-25-05	Added wind beams and anchor plates

This document was originally issued and sealed by MARK S GAYDOS, Registration Number PE-4518, on 05/25/05 and the original document is stored at the North Dakota Department of Transportation